

# ALL AMERICAN

## OPERATING INSTRUCTIONS

### Model 25X Electric Pressure Steam Sterilizer



25x Shown with Optinal Base, M100,014

## CAUTION! READ THESE IMPORTANT SAFEGUARDS!

FAILURE TO FOLLOW INSTRUCTIONS AND/OR IMPROPER USE MAY RESULT IN SCALDING, BODILY INJURIES OR EXPLOSION.

When using the pressure steam sterilizer, basic safety precautions should always be followed:

1. Read and understand instruction manual before operating unit.
2. Do not touch hot surfaces. Use handles and pot holders.
3. Close supervision is necessary when the sterilizer is used near children.
4. Extreme caution must be used when moving a sterilizer containing hot liquids.
5. Do not use the sterilizer for other than intended use.
6. Always check the pressure release devices for clogging before use.
7. This sterilizer operates under pressure. Improper use may result in scalding injury. Make certain unit is properly closed before operating. Read Operating Instructions.
8. Never loosen wing nuts until the steam pressure gauge registers zero and you have allowed any remaining pressure to escape by opening the control valve (lever in the vertical position).
9. Do not open the sterilizer until the unit has cooled and internal pressure has been reduced. Gauge should read zero at this time. Read Operating Instructions.
10. Never use the sterilizer for cooking or processing food.
11. Never place oil in or on this sterilizer.
12. Do not subject your sterilizer to sudden extreme temperature changes, as this will cause expansion or contraction which can crack a cast aluminum utensil. Do not move a sterilizer from a cold storage area directly onto a hot flame or element. Do not add cold water to a sterilizer which has boiled dry and is still hot. Do not cool the sterilizer suddenly by pouring cold water on it or wrapping cold wet towels around it.
13. Always operate sterilizers on surfaces that will not be damaged by heat. We recommend the use of our support base. See page 5, item 6.
14. As in all clinical laboratory settings, wear safety glasses when attending to your sterilizer.

**SAVE THESE INSTRUCTIONS**

# Operating Instructions for Model 25X Electric Pressure Steam Sterilizer

**IMPORTANT: DO NOT OPERATE THIS PRESSURE STEAM STERILIZER UNTIL YOU HAVE THOROUGHLY READ THESE OPERATING INSTRUCTIONS.**

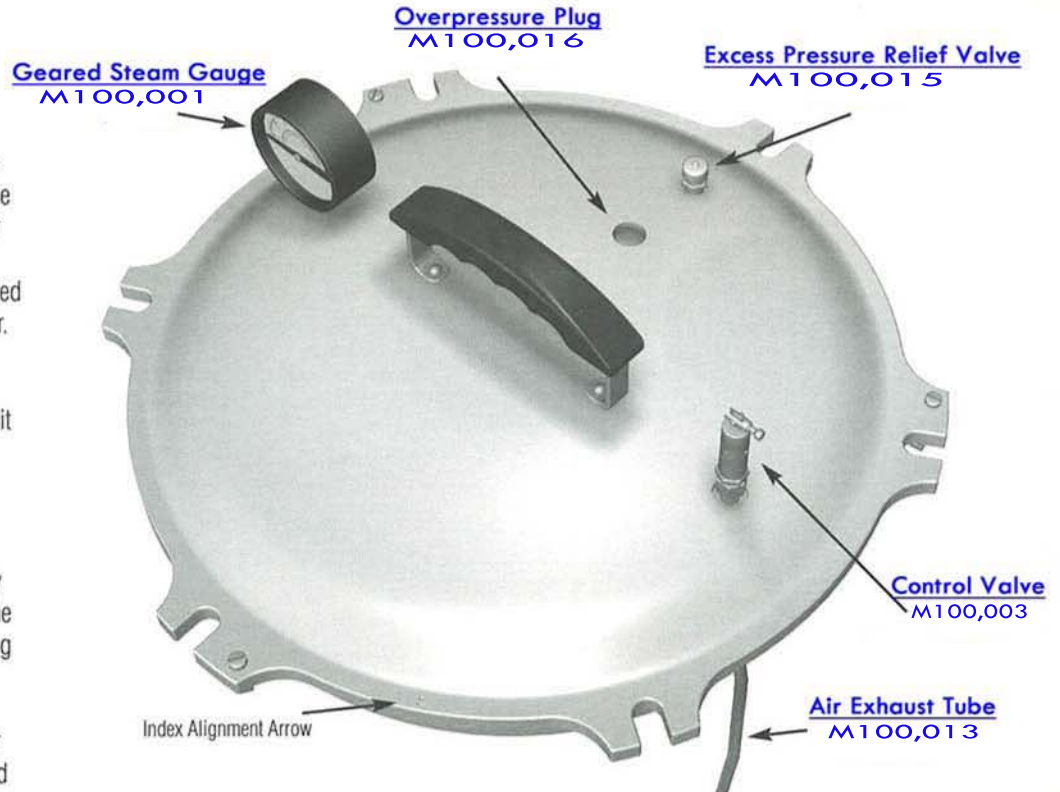
## Cleaning

When you are done using your sterilizer, you need to empty the water from the unit, rinse thoroughly and dry completely. This procedure needs to be done daily. Do not leave water in the unit overnight. Rinse thoroughly between water changes. Store your sterilizer in a dry area. On your next use, fill the sterilizer with clean distilled water. Distilled water is the recommended water. If distilled water is not available, then you may use your local water. If your local water supply contains lime or high levels of minerals, the unit will require periodic cleaning to remove and prevent the buildup of deposits.

Units should be cleaned whenever there is a buildup of lime or mineral deposits. After many cycles, a white deposit may begin to form on the bottom of the sterilizer. We recommend cleaning with a lime remover. Manufacturers of coffee makers have cleaning solutions which may be used. There are also solutions available at your local hardware and drug stores that can be used to clean aluminum. Follow the manufacturer's instructions and make up a solution of the cleaner, filling your sterilizer above the standard operating level. Let the sterilizer stand a few minutes then rinse thoroughly. You may have to repeat this procedure a few times to fully remove the lime and mineral deposits from your sterilizer.

**Never turn the sterilizer "ON" when filled with a cleaning solution.**

You may also use standard white vinegar to clean your sterilizer. Fill your sterilizer above the standard operating level with vinegar and let it stand a few minutes then rinse thoroughly. You may have to repeat this procedure a few times to fully remove the lime and mineral deposits from your sterilizer.



## Allowable Operating Environments

This unit was designed to operate in an indoor environment between 5° and 40° Celsius or 41° and 104° Fahrenheit. An allowable pollution degree per IEC 664 cannot exceed a rating of two. The allowable relative humidity levels are 80% for temperatures up to 31°C (88°F) and decreasing linearly to 50% at 40°C (104°F).

### Elevation above sea level.

At altitudes greater than sea level, settings need to be adequately adjusted to compensate for the effect of altitude on the boiling point of water. We suggest you increase pressure by 0.5psi for every 1000 ft. of elevation above sea level.

City Altitude	Steam Pressure Required
Sea level	15-17 psi
2000ft	16-18 psi
4000ft	17-19 psi
6000ft	18-20 psi
8000ft	19-21 psi
10,000ft	20-22 psi

The power cord supplied with this unit is a 3-pronged grounded plug. This plug is intended to be used with a standard 3-prong grounded wall receptacle to minimize the possibility of electric shock hazard from this unit. Do not for any reason cut off the grounding prong or use a 2-prong adapter plug. This unit is rated to be operated using local consumer electrical power. It has a transient over voltage rating of II. The 120V unit is designed to operate at a frequency of 50/60 Hz with a line of voltage of 115 volts AC +/- 10%. The 240V unit is designed to operate at a frequency of 50/60 Hz with a line voltage of 230 volts AC +/- 5%.

**If in doubt, the user should have the wall receptacle and circuit checked by a qualified electrician to make sure the receptacle can provide adequate current and voltage, and is properly grounded.**





Fig. A

## OPERATION

### 1. LUBRICATE METAL-TO-METAL SEAL.

Apply lubrication to the point or edge where side wall and bevel meet on the inside of bottom (See Fig. 1 where arrow tip is pointing). The bevel is not the seat; only the point or edge where bevel meets the wall. We recommend using a high temperature lubricant such as a high vacuum grease. Only a thin film is required. Excess amounts may cause leakage or gumming. Most scientific supply houses have sterilizer lubricant. There are many brands available.

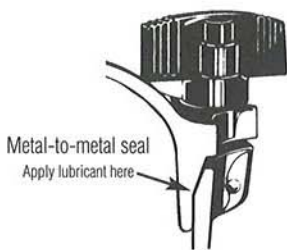


Fig. 1

2. Remove the cover from sterilizer by turning the bakelite wing nuts in a counter-clockwise motion. Always undo two opposite wing nuts at a time. Next, remove inner container from the sterilizer (See Fig. A, page 2). Make certain that the stainless steel support stand (See Fig. A) is in the bottom of the sterilizer and that the opening in the outer ring is in the area of the heating element. Pour clean water (distilled is preferred) into sterilizer to a depth of not less than 2 inches (5.08cm) nor more than  $2\frac{3}{4}$  inches (7.0cm). Place inner container rack (See Fig. A) into the bottom of the container (See Fig. A,) with the lip or edge side downward. The purpose of the inner container rack is to provide an air space in the bottom of the container so that air may circulate freely. Place articles to be sterilized inside the container. (Be sure to arrange items so that the free circulation of steam can occur during sterilization.) You may wish to place a towel or cloth on top of the items in the container to absorb any moisture which may drip down from the cover. Then place packed container into the sterilizer. Make certain that the air exhaust tube channel (located on the inside of the container) is in position on the right side of the container when it is placed in the unit. This is necessary so that when the cover is placed on the unit you can guide the air exhaust tube (See Fig. A) into the channel.

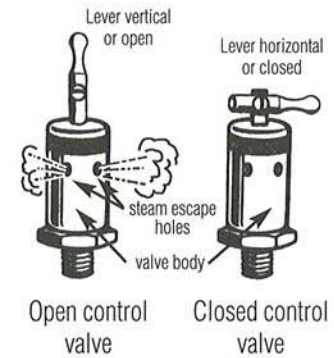
3. Place sterilizer cover on unit, making sure that the index alignment arrow on the cover aligns with index line/arrow on side of bottom. Make certain when placing the cover on the unit that the flexible tube is inserted into the guide channel on the inside wall of the aluminum container. It is helpful to place the container in the unit with the guide channel on the right hand side as you face the unit. Tighten the wing nuts on the cover evenly, always tightening down two opposite wing nuts at one time. This will draw the cover down evenly and assure a proper seal. NEVER USE A WRENCH OR ANY MECHANICAL DEVICE TO TIGHTEN WING NUTS. NEVER HAMMER OR STRIKE THE WING NUTS OR COVER WHILE OPENING OR CLOSING.

4. Plug power supply cord into the proper outlet. Keep in mind that if your unit operates on 120 volts, the plug contacts would have a different configuration from a unit designed to operate on 240 volts. Please refer to the dial plate on the front of the control box and note in the upper left-hand corner if your unit is 120 or 240 volts. Next, turn the on/off toggle switch to "on" position. At this time, the red pilot light will come on indicating that current is going into the unit and that the heating element is operating. If the water you have placed in the unit is cold, it will require approximately 35 minutes before steam begins escaping from the control valve. Since it requires more time to bring cold water up to operating temperature than it takes warm or hot water, you can reduce this time factor by:

A. Pouring in hot water in place of cold, or

B. Pouring in cold water and then turning on the unit so that the water is getting warmed prior to your beginning the sterilization procedure

In both cases, observe the proper water level.



Open control valve

Fig. 2

Closed control valve

Fig. 3

5. Open CONTROL VALVE (See Fig. 2) by placing valve lever in an upright position. The steam generated at the bottom of the sterilizer will travel around the outside of the container and then down through the material in the container to the bottom and force the air from the bottom of container up through the flexible air exhaust tube and out of the control valve.

**It is important that the steam be permitted to escape vigorously from the unit for at least five-seven minutes, or until you see a continuous flow of steam. Then you may close the control valve.**

This process of permitting the steam to escape is called EXHAUSTING and is necessary to remove the air trapped in the unit. **The greatest cause of sterilization failure is the trapping of air in the material being sterilized. Trapped air cannot escape. It is imperative that all trapped air be exhausted.** With the control valve in the closed position (See Fig. 3), pressure will rise inside the sterilizer and will be indicated on the pressure gauge.





6. **HEAT CONTROL KNOB M100,012.** This knob is located in the center of the control box and has been calibrated at the factory. To increase heat, turn the heat control knob in a counter-clockwise direction; to reduce the heat, turn in a clockwise direction. When the gauge reaches operating pressure of 17-21 psi, turn the knob clockwise to reduce heat. Maintain a close watch of the pressure gauge, and adjust heat up or down as appropriate. The heat control knob determines the duration that the thermostat contact points remain open and closed. The thermostat reacts to temperature changes and is controlled by the manner in which the heat control knob is operated. Whenever current is going into the heating element, the red pilot light will be illuminated and when current is not being used, the pilot light will be out. The control knob is fastened to the shaft of the thermostat by a set screw. The shaft of the thermostat is indented to accommodate this set screw.

7. **STERILIZATION PERIOD.** The sterilization period begins when the pressure steam gauge needle registers in the green sterilization band shown on the face of the gauge. The sterilization pressure range is 17-21 PSI. **AT THIS TIME YOU BEGIN THE TIMING OF THE STERILIZATION CYCLE AND CONTINUE TIMING FOR NOT LESS THAN 35 MINUTES.**

8. At the end of the sterilization period, turn the on/off toggle switch to "off" and move the lever on the control valve to an upright (vertical) position so that the steam is permitted to escape. When the lever is in an upright position, the steam will escape at maximum. To avoid touching the hot lever, you may use any object such as a pencil or hot pad, etc., to move the lever from the closed to open (vertical) position. When the pressure gauge indicates zero, loosen the wing nuts evenly by turning two opposite wing nuts counter-clockwise at one time. The wing nuts, side handles and top handle will be hot. Always use hot pads when handling. Having removed all wing nuts from the slots in the cover, use the top handle to lift the cover slightly, turning the cover counter-clockwise for easy removal. **When removing the cover, always tilt and angle the cover away from yourself or any other people in the area to prevent injury from the hot steam.**

In the event your cover sticks, use a large standard screwdriver to pry the top loose. Place the end of the screwdriver at an angle between the cover and bottom near a wing nut assembly. Do not go straight in with the screwdriver or you will damage the metal-to-metal seal. Gently pry upward using the screwdriver as a lever. Continue to pry upward at each wing nut assembly area uniformly so that the cover is raised evenly. In most cases, the cover should come off rather quickly. If you need further assistance, please read metal-to-metal seal maintenance instructions on page 5.

The inner container may then be removed from sterilizer for unloading. Use hot pads when removing.

To start another sterilization cycle, repeat procedure as outlined.

If the sterilizer is not going to be used again, before putting the unit away, all water should be emptied from the unit and the unit be thoroughly dried inside. It is recommended that the water be poured out of the unit while the bottom is still warm. The heat will help dry the unit if you leave the cover off for 15 minutes before placing the cover on the unit for storage. For storage purposes, it is only necessary to slightly tighten the wing nuts enough to hold the cover on the bottom. When storing, it is recommended that the control valve be left in a vertical position to permit air to circulate into the bottom.

## MAINTENANCE:

### 1. METAL-TO-METAL SEAL. (See Fig. 1)



Fig. 1

Periodically check your seal. The metal-to-metal seal must be lubricated periodically (as stated in the instructions) to prevent the cover from sticking to the bottom because of dryness or lack of lubrication. If the sterilizer is operated without any lubricant, this could result in severe damage to the metal-to-metal seal and make it very difficult to remove the cover in some cases, and also become very difficult to maintain a steam-tight seal. It is recommended that a small amount of high temperature lubricant, such as high vacuum grease, be applied every third or fourth use. The metal-to-metal seal must not be permitted to become dry. It is also important to wipe off the metal-to-metal seal by using a clean towel to remove any build-up of foreign material or particles trapped in the lubricant. To remove any build-up of hardened lubricant on the seal, use 0000 grade steel wool in a circular motion around the metal-to-metal seal

### 2. PRESSURE GAUGE, M100,001 (See Fig. 4)

Do not immerse the pressure gauge in water when cleaning the unit. The pressure gauge normally does not require any maintenance except to make certain the opening into the gauge on the underside of the cover is open



Fig. 4  
Pressure Gauge

and free of any foreign matter. If the gauge is ever dropped, the unit should not be used until the gauge has been checked to make sure that it is functioning properly. If your gauge needs to be checked, take it to a local scientific supply house.

### 3. CONTROL VALVE, M100,003 (See Fig. 2 & 3)

To ensure long life and proper operation of the control valve, periodic cleaning is recommended. To clean, unscrew the "knurled top" portion and clean thoroughly in hot soapy water. If any foreign material has built up inside the unit, clean the ball and seat using a

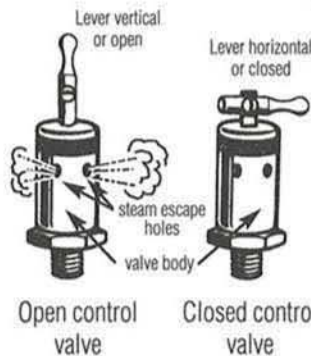


Fig. 2

Fig. 3

solvent such as acetone or a similar product. Be sure to clean the control valve in hot soapy water once again after using any solvent. In the event that you are unable to properly clean any buildup of foreign material in your control valve, then it is recommended that the control valve be discarded and replaced with a new control valve.



Fig. 5

### 4. AIR EXHAUST TUBE, M100,013 (See Fig. 5)

It is essential that the air exhaust tube be frequently checked to make sure that air passes freely through it. We recommend that you blow air through the air exhaust tube at least once a month to make certain it is not blocked or plugged with any foreign material. The air exhaust tube is not part of the control valve and can be removed separately from the cover in the event that it is blocked. Clean out the air exhaust tube by using a small diameter wire, running it through the entire length of the tube several times. If you notice a buildup of any foreign material on the inside of the air passage or a buildup of any corrosion on the inside of the air passage, then it is recommended that you discard this tube and replace it with a new air exhaust tube.

### 5. EXCESS PRESSURE RELIEF VALVE, PART NO. M100,015 (See Fig. 6)

This sterilizer is equipped with a new type of excess pressure relief valve. It is designed for longer, maintenance-free service; however, we do recommend that the valve be replaced every three years in normal service. The valve is designed to release pressure at 26 PSI ( $\pm 1$  PSI). Each valve is equipped with a deflector cap which will direct any steam released in a downward direction. Also it is possible to manually release steam and pressure in this unit by simply grasping the deflector cap and pulling upwards slightly. The deflector cap will be hot. Always use hot pads when handling. This will instantly release pressure inside the unit until you release the cap and the valve, at which time the valve instantly reseals, thereby stopping any further pressure from escaping.

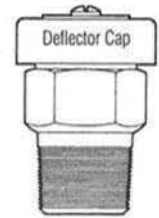


Fig. 6 Part No. M100,015 Excess Pressure Relief Valve



M100,014

### 6. SUPPORT BASE FOR 25X M100,007

See above photo. This support base is an accessory item that is available for your sterilizer. The function of the support base is to elevate the bottom of the sterilizer approximately 1 3/8" above the table or counter surface upon which the unit is to be operated. The support base will eliminate any heat damage to the table or counter surface as it permits the free circulation of air. Should you require a support base for your unit, they may be obtained from your supplier or you may write the factory. *For correct placement of the support base, please refer to picture on cover.*



## 7. OVERPRESSURE PLUG, M100,016

This ALL-AMERICAN Sterilizer is equipped with an additional safety device which is the Overpressure Plug, M100,016. The purpose of the overpressure plug is to offer an extra margin of safety whenever the sterilizer is used. The overpressure plug is designed to release pressure in the range of 30 to 50 PSI.

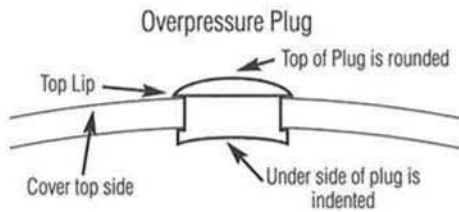


Fig. 7

The overpressure plug is made from silicone and is red in color and is found on the top surface of the sterilizer cover, located directly to the rear of the top handle, in front of [Part M100,015](#) Excess Pressure Relief Valve. See Figures 7 (page 2) and A.

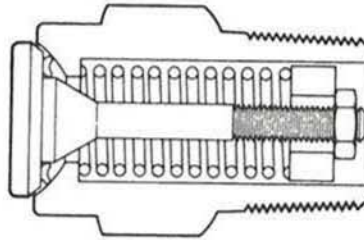
For the most efficient results and best possible performance, it is recommended that you replace the overpressure plug every 6 months. It should always be replaced whenever it becomes hard or deformed.

At least every month during period of use, the opening in the cover where the overpressure plug fits should be checked to determine that no foreign material, residue, or buildup of grease is present, and the opening be cleaned with hot soapy water (a toothbrush is helpful) to maintain a clean opening. This cleaning/inspection is in addition, of course, to normal daily cleaning performed after using the unit.

The overpressure plug can be removed for cleaning using fingers to pull it out of its opening from the underside of the cover. Before you re-install the overpressure plug, check the opening in the cover to be sure that it is absolutely free of any foreign material or grease/residue buildup. After cleaning, reinsert the overpressure plug by pushing the round top side into the opening from the underside of the cover. When the overpressure plug is correctly in position, the indented portion will be visible from the underside of the cover. Be certain to check after inserting plug that the round top of plug and top lip are fully thru the opening and that the top lip is not folded under. See Figure 7.

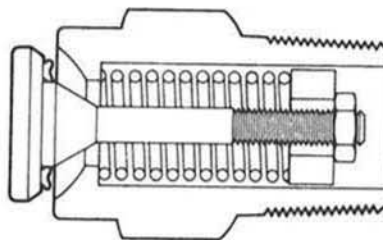
## How Part M100,015 Works

### Closed



Resilient seal design prevents leakage. Sealing efficiency increases with increased pressure up to cracking pressure. Metal-to-metal seat on low pressure side supports spring load, prevents sticking.

### Open



When system pressure overcomes spring force, poppet opens, momentarily exposing variable orifice between poppet and body to pass increasing flow with minimum pressure rise without blowdown.

### Resealing

Resilient seal automatically establishes line of contact with spherical seat. Seal provides dead tight reseal very close to cracking pressure.

**Operating characteristics** of the excess pressure relief valve are:

- Zero leakage to 95-98% of cracking pressure.
- Increased sealing efficiency as pressure increases. Resilient "Q" ring seal is forced against metal seat as pressure increases up to set cracking pressure.
- Cracking pressure accuracy. Valves are preset to required cracking pressure of 26 PSI.

## IMPORTANT STERILIZATION FACTS

Steam is an ideal sterilizing agent since it kills microbes quickly, and steam has the additional important property of self-caused forced penetration. A large volume of steam condenses to a very small volume of water and more steam is drawn in to replace it. This causes excellent penetration of fabrics and some papers and plastic films. *Hot air or sterilizing gases do not approach steam in their ability to penetrate.*

The greatest cause of sterilization failure is the trapping of air in the material being sterilized so that it cannot escape. When this happens, the air forms a cool air pocket which has a lower temperature than the surrounding steam. It can also form an air-steam mixture which has a lower temperature than the pure steam. The most frequent causes for this failure are dressing packs wrapped too tightly, made too large, failure to turn basins and other metal or glass containers onto their sides, and failure to properly follow the directions as to current sterilizer operation and maintenance. (Refer to

Item 5, page 3, regarding "exhausting" to remove trapped air.)

It is essential that all sterilizers be regularly checked for proper steam penetration to the center of the load. Since the first sign of sterilization failure is a drop in the temperature at the *center* of the dressing pack or sterilizer load, it is recommended that a temperature measuring device be used at the center of each pack or load of instruments. Indicating tape or strips are no substitute for the self-contained types as... "melt indicator inside a small glass vial," as temperature accuracy is essential. The pressure gauge on the sterilizer indicates the approximate temperature at the *exhaust line*, not at the center of the packs. The gauge cannot indicate the presence of trapped air, therefore, center-of-pack controls or vials are recommended. Different types and brands of sterilization indicators are available from your hospital supply or scientific supply dealer.

**PRESSURE GAUGE ACCURACY:** The gauges are rated as having an accuracy of 3%-2%-3%. This designates plus or minus 3% of the full span for the first and last quarter of the dial, and 2% for the middle 50% of the dial.

More specifically, this gauge rating conforms to the pressure gauge standard ANSI B40-1-1980. This standard is entitled "Gauges-Pressure, Indicating Dial Type-Elastic Element," and covers every aspect of pressure gauge manufacture and use. The gauge is considered "Accuracy Grade B" in accordance with this specification.



## 25X SPECIFICATIONS



Shown with Optional Support Base\*

### Model 25x (25 qt/24 liter)

<b>Model 25X-120:</b>	120 Volt, 50/60 Hz 1050 watts/8.75 amps
<b>Model 25X-240:</b>	240 Volt, 50/60 Hz 1050 watts/4.38 amps
<b>Gross Capacity</b>	25 qt / 24 liter
<b>Overall Height</b>	16 <sup>3</sup> / <sub>4</sub> " / 42.5cm
<b>Bottom Height</b>	12 <sup>1</sup> / <sub>4</sub> " / 31.2cm
<b>Inside Diameter</b>	12 <sup>5</sup> / <sub>8</sub> " / 32.1cm
<b>Unit Weight</b>	26 lbs. / 11.8kg.
<b>Inner Container No. 2156</b>	
Height	8 <sup>1</sup> / <sub>2</sub> " / 21.6cm
Diameter	11 <sup>1</sup> / <sub>8</sub> " / 28.3cm
Circumference	35 <sup>5</sup> / <sub>8</sub> " / 91.1cm
Capacity	14.5 qt / 13.7 liter
Volume	835in <sup>3</sup> / 13,688cm <sup>3</sup>
<b>Carton Dimensions</b>	19 <sup>1</sup> / <sub>2</sub> " x 17 <sup>1</sup> / <sub>2</sub> " x 19"
	56.5cm x 44.5cm x 48.3cm
<b>Shipping Weight</b>	30 lb. / 13.6kg.
<b>Unit Pack: 1</b>	Cube: 3.75
<b>Optional No. 2180 Support Base</b>	
Outside Diameter	2" / 5cm high
Inside Diameter	12 <sup>3</sup> / <sub>4</sub> " / 32.4cm
	12 <sup>3</sup> / <sub>8</sub> " / 31.4cm
	Elevates Sterilizer Above Surface 1 <sup>3</sup> / <sub>8</sub> " / 3.5cm

## OTHER ELECTRIC MODEL SPECIFICATIONS



Shown with Optional Support Base\*

### Model 50x (25 qt/24 liter)

<b>Model 50X-120:</b>	120 Volt, 50/60 Hz 1650 watts/13.75 amps
<b>Model 50X-240:</b>	240 Volt, 50/60 Hz 1650 watts/6.88 amps
<b>Gross Capacity</b>	25 qt/24 liter
<b>Overall Height</b>	16 <sup>3</sup> / <sub>4</sub> "/42.5cm
<b>Bottom Height</b>	12 <sup>1</sup> / <sub>4</sub> "/31.2cm
<b>Inside Diameter</b>	12 <sup>5</sup> / <sub>8</sub> "/32.1cm
<b>Unit Weight</b>	29 lbs./13.2kg.
<b>Inner Container No. 2156</b>	
Height	8 <sup>1</sup> / <sub>2</sub> "/21.6cm
Diameter	11 <sup>1</sup> / <sub>8</sub> "/28.3cm
Circumference	35 <sup>5</sup> / <sub>8</sub> "/91.1cm
Capacity	14.5 qt/13.7 liter
Volume	835in <sup>3</sup> /13,688cm <sup>3</sup>
<b>Carton Dimensions</b>	22 <sup>1</sup> / <sub>4</sub> " x 17 <sup>1</sup> / <sub>2</sub> " x 19"
	56.5cm x 44.5cm x 48.3cm
<b>Shipping Weight</b>	34 lb./15.4kg.
<b>Unit Pack: 1</b>	Cube: 4.28
<b>Optional No. 2180 Support Base</b>	
Outside Diameter	2 <sup>1</sup> / <sub>2</sub> " high
Inside Diameter	12 <sup>3</sup> / <sub>4</sub> "/32.4cm
	12 <sup>3</sup> / <sub>8</sub> "/31.4cm
	Elevates Sterilizer Above Surface 1 <sup>3</sup> / <sub>8</sub> "/3.5cm



Shown with Optional Support Base\*

### Model 75x (41 qt/39 liter)

<b>Model 75X-120:</b>	120 Volt, 50/60 Hz 1650 watts/13.75 amps
<b>Model 75X-240:</b>	240 Volt, 50/60 Hz 1650 watts/6.88 amps
<b>Gross Capacity</b>	41 qt/39 liter
<b>Overall Height</b>	19"/48.3cm
<b>Bottom Height</b>	14 <sup>1</sup> / <sub>4</sub> "/36.2cm
<b>Inside Diameter</b>	15 <sup>1</sup> / <sub>4</sub> "/38.7cm
<b>Unit Weight</b>	45 lbs./20.4kg.
<b>Inner Container No. 4156</b>	
Height	10 <sup>1</sup> / <sub>4</sub> "/26cm
Diameter	14 <sup>7</sup> / <sub>32</sub> "/36.6cm
Circumference	44 <sup>7</sup> / <sub>32</sub> "/113cm
Capacity	27.3 qt/25.8 liter
Volume	1578in <sup>3</sup> /25,856cm <sup>3</sup>
<b>Carton Dimensions</b>	24" x 24" x 21"
	61cm x 61cm x 53.3cm
<b>Shipping Weight</b>	51 lb./23.1kg.
<b>Unit Pack: 1</b>	Cube: 7
<b>Optional No. 4180 Support Base</b>	
Outside Diameter	3 <sup>7</sup> / <sub>8</sub> "/6cm high
Inside Diameter	16 <sup>1</sup> / <sub>4</sub> "/41.3cm
	15 <sup>7</sup> / <sub>32</sub> "/38.1cm
	Elevates Sterilizer Above Surface 2 <sup>1</sup> / <sub>4</sub> "/5.7cm

## NON-ELECTRIC MODELS ARE ALSO AVAILABLE IN THREE SIZES:



### Model 1915x (15 qt/14 liter)

<b>Gross Capacity</b>	15 qt/14 liter
<b>Overall Height</b>	12 <sup>1</sup> / <sub>4</sub> "/31.2cm
<b>Bottom Height</b>	7 <sup>3</sup> / <sub>4</sub> "/19.7cm
<b>Inside Diameter</b>	12 <sup>5</sup> / <sub>8</sub> "/32.1cm
<b>Unit Weight</b>	15 lbs./6.8 kg.
<b>Inner Container No. 2163</b>	
Inside Depth	5 <sup>3</sup> / <sub>4</sub> "/14.6cm
Inside Diameter	11 <sup>1</sup> / <sub>8</sub> "/28.3cm
Circumference	35 <sup>5</sup> / <sub>8</sub> "/91.1cm
Capacity	9.5 qt/9 liter
Volume	550in <sup>3</sup> /9029cm <sup>3</sup>
<b>Carton Dimensions</b>	15 <sup>1</sup> / <sub>2</sub> " x 14 <sup>1</sup> / <sub>2</sub> " x 13 <sup>1</sup> / <sub>2</sub> "
	39.4cm x 36.8cm x 34.3cm
<b>Shipping Weight</b>	20 lb./9.1kg.
<b>Unit Pack: 1</b>	Cube: 1.76



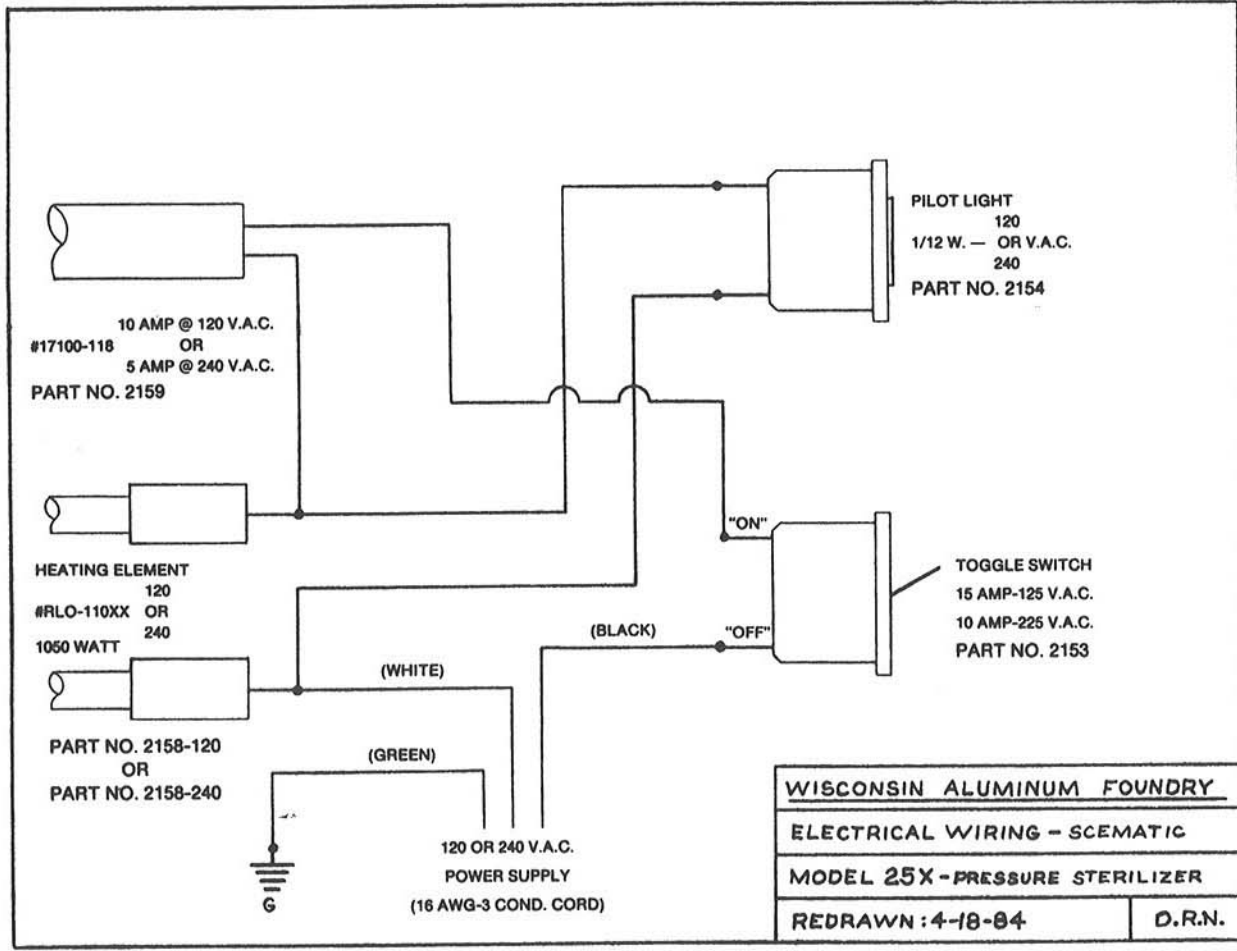
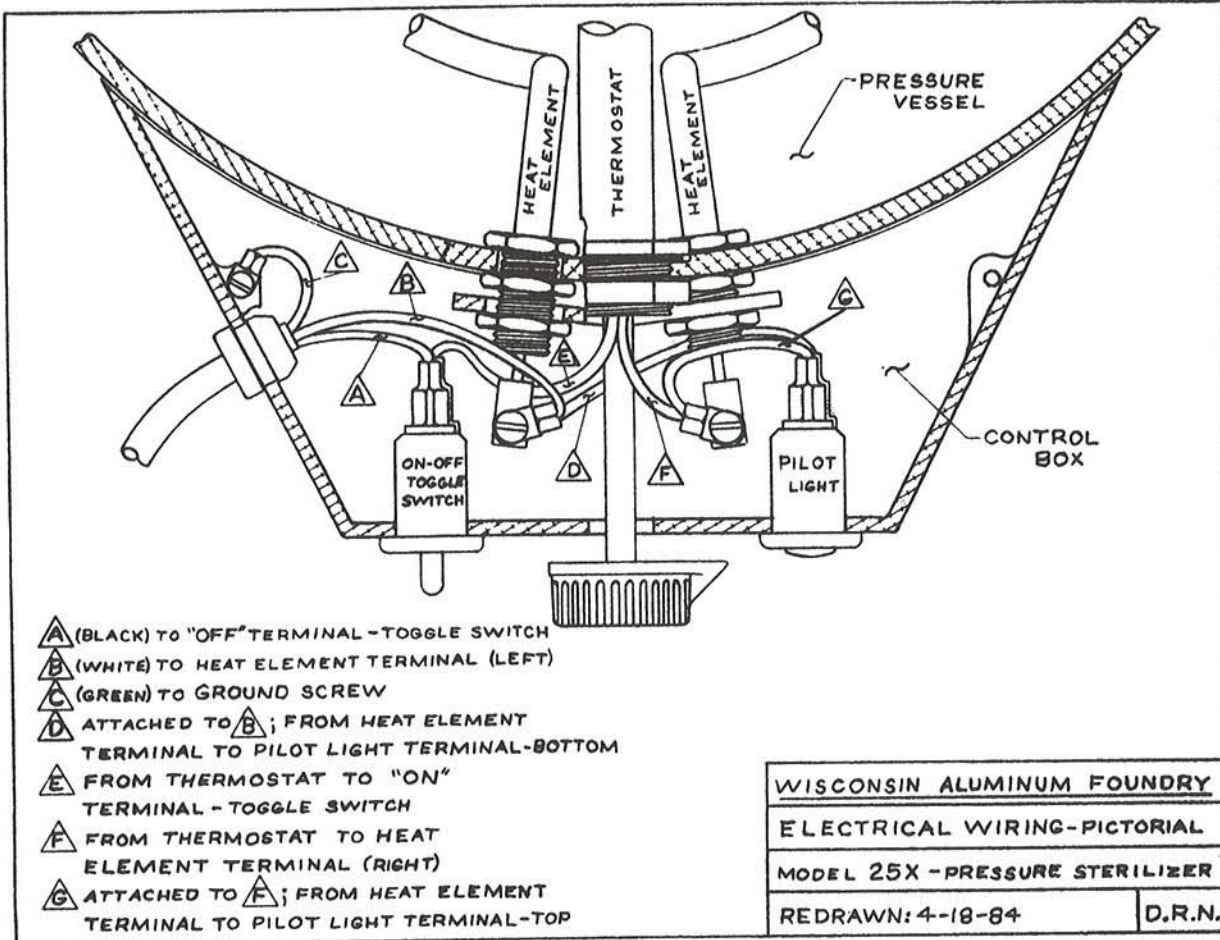
### Model 1925x (25 qt/24 liter)

<b>Gross Capacity</b>	25 qt/24 liter
<b>Overall Height</b>	16 <sup>3</sup> / <sub>4</sub> "/42.5cm
<b>Bottom Height</b>	12 <sup>1</sup> / <sub>4</sub> "/31.2cm
<b>Inside Diameter</b>	12 <sup>5</sup> / <sub>8</sub> "/32.1cm
<b>Unit Weight</b>	18 <sup>1</sup> / <sub>4</sub> lbs./8.3kg
<b>Inner Container No. 2162</b>	
Inside Depth	10 <sup>1</sup> / <sub>4</sub> "/26cm
Inside Diameter	11 <sup>1</sup> / <sub>8</sub> "/28.3cm
Circumference	35 <sup>5</sup> / <sub>8</sub> "/91.1cm
Capacity	17.6 qt/16.6 liter
Volume	1016in <sup>3</sup> /16,655cm <sup>3</sup>
<b>Carton Dimensions</b>	15 <sup>1</sup> / <sub>2</sub> " x 14 <sup>1</sup> / <sub>2</sub> " x 18 <sup>1</sup> / <sub>2</sub> "
	39.4cm x 36.8cm x 47cm
<b>Shipping Weight</b>	24 lb./10.9kg.
<b>Unit Pack: 1</b>	Cube: 2.41



### Model 1941x (41 qt/39 liter)

<b>Gross Capacity</b>	41 qt/39 liter
<b>Overall Height</b>	19"/48.3cm
<b>Bottom Height</b>	14 <sup>1</sup> / <sub>4</sub> "/36.2cm
<b>Inside Diameter</b>	15 <sup>1</sup> / <sub>4</sub> "/38.7cm
<b>Unit Weight</b>	33 lbs./15kg.
<b>Inner Container No. 2164</b>	
Inside Depth	10 <sup>1</sup> / <sub>2</sub> "/26.7cm
Inside Diameter	14 <sup>7</sup> / <sub>32</sub> "/36.6cm
Circumference	44 <sup>7</sup> / <sub>32</sub> "/113cm
Capacity	27.9 qt/26.4 liter
Volume	1613in <sup>3</sup> /26,451cm <sup>3</sup>
<b>Carton Dimensions</b>	19" x 19" x 20 <sup>1</sup> / <sub>2</sub> "
	48.3cm x 48.3cm x 52.1cm
<b>Shipping Weight</b>	41 lb./18.6kg.
<b>Unit Pack: 1</b>	Cube: 4.28





# ALL-AMERICAN 25X PRESSURE STEAM STERILIZER PARTS LIST

Part No.	Description
M100,017	<u>Clamp Bolt</u>
M100,018	<u>Pin for clamp bolt</u>
M100,019	<u>bakelite wing nut</u>
M100,003	<u>control valve</u>
M100,001	<u>geared steam gauge</u>
M100,020	<u>lens for steam gauge (replacement)</u>
M100,002	<u>bakelite top handle</u>
M100,021	<u>bakelite top handle screw</u>
M100,022	<u>retaining bayonet clamp</u>
M100,023	<u>retaining bayonet clamp screw</u>
M100,005	<u>rack fits inside aluminum container</u>
M100,016	<u>overpressure plug for sterilizer, red color</u>
M100,015	<u>excess pressure relief valve</u>
M100,006	<u>stainless steel support stand</u>
M100,011	<u>on/off toggle switch</u>
M100,008	<u>pilot light, 120volt models</u>
M100,009	<u>pilot light, 240 volt models</u>
M100,013	<u>air exhaust tube for 25x</u>
M100,004	<u>aluminum container for 25x</u>
M100,024	wiring harness, grounded 3-wire power supply cord, 120 volt models
M100,025	wiring harness, grounded 3-wire power supply cord, 240volt models
M100,026	<u>Strain relief bushing</u>
* M100,027	<u>heating element (1050 watt, includes fiber gaskets)</u>
* M100,028	<u>heating element (1050 watt, includes fiber gaskets)</u>
M100,029	<u>Fiber gasket for #2158 heating element (two Needed)</u>
* M100,010	<u>thermostat (includes fiber gasket)</u>
M100,030	<u>fiber gasket for #2159 thermostat (one needed)</u>
M100,012	<u>bakelite heat control knob for thermostat</u>
M100,031	<u>Cast aluminum control box</u>
M100,014	<u>support base for 25x (will elevate unit 1 3/8 above table surface)</u>
* M100,032	<u>thermometer, stainless steel, dual scale, c scale 10-150,f scale 50-300</u>

\*There is a factory installation fee for the heating element, thermostat, and thermometer.  
 We recommend that the heating element, thermostat, and thermometer be installed at the factory. **NO GUARANTEE OR RESPONSIBILITY FOR THE PROPER FUNCTIONING OF THESE PARTS CAN BE ASSUMED BY THE COMPANY IF THEY ARE NOT INSTALLED AT THE FACTORY.**

## ALL-AMERICAN PRESSURE STEAM STERILIZER LIMITED WARRANTY

This quality sterilizer is designed and manufactured to provide many years of satisfactory performance under normal use. Wisconsin Aluminum Foundry pledges to the original owner that should there be any defects in material or workmanship during the first year after purchase, we will repair or replace it at our option. This pledge does not apply to damage caused by shipping. To obtain service under the warranty:

1. A Return Authorization (RA) Number is required by our company to return any product manufactured by Wisconsin Aluminum Foundry. Merchandise returned without an RA Number will be refused. To obtain an RA Number contact our company by either writing, faxing or calling our Customer Service Department at **1-800-762-1586**. All defective merchandise must be returned to our factory before credit or a replacement will be issued; do not destroy the defective merchandise. Any products returned must include paperwork stating the reason for the return, when and where the item(s) were purchased, model numbers, quantities, etc., and who to contact with any questions. Prior to return to the factory, all sterilizers **must** be cleaned to remove any biological material or contaminants.

### IMPORTANT — PLEASE READ

Any alterations, modifications or changes of any type made to the sterilizer or to any component thereof will void this warranty!

We want you to obtain maximum performance from using this quality sterilizer and we ask that you take the time to read and follow the operating instructions. Failure to follow instructions, damage caused by improper replacement parts, abuse, or misuse will void this pledge. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is Wisconsin Aluminum Foundry's personal pledge to you and is being made in place of all other express warranties.

### RETURN/SERVICE

Should the pressure sterilizer ever be dropped, the unit must be examined to determine if any damage has occurred. We recommend the unit be returned to our factory to be thoroughly checked inside and out for any damage. Prior to return to the factory, all sterilizers **must** be cleaned to remove any biological material or contaminants. We will examine the entire unit, including the control valve and gauge, and determine if the unit has sustained damage, and notify you of our findings.

A Return Authorization (RA) Number is required by our company to return any product manufactured by Wisconsin Aluminum Foundry. Merchandise returned without an RA Number will be refused. To obtain an RA Number contact our company by either writing, faxing or calling our Customer Service Department at **1-800-762-1586**. All defective merchandise must be returned to our factory before credit or a replacement will be issued; do not destroy the defective merchandise. Any products returned must include paperwork stating the reason for the return, when and where the item(s) were purchased, model numbers, quantities, etc., and who to contact with any questions.

Should you have any questions at all about the operation of your ALL-AMERICAN Pressure Sterilizer, please write the Consumer Products Division, and we will promptly answer your questions.

To order any replacement parts, please refer to the parts price list. If you do not have a copy of our current parts price list, you may write the company and one will be forwarded to you by return mail.